February 28, 2003

William Wimmenauer
Industrial Anodizing Co., Inc.
1610 West Washington Street
Indianapolis, Indiana 46206

Re: Registered Construction and Operation Status,
097-15011-00414

Dear Mr. Wimmenauer:

The application from Industrial Anodizing Co., Inc., received on September 18, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following stationary source consisting of the operation of anodizing of metals, to be located at 1610 West Washington Street, Indianapolis, Indiana 46206, is classified as registered:

(a) One (1) acid bath containing phosphoric and nitric acids mixed with water. Acid mist is controlled with and air scrubber, identified as emission unit 5110-01, with a maximum capacity of 4.2 cubic feet per minute (acfm), and exhausting to stack 1.

(b) One (1) natural gas boiler with maximum heat input rate of 0.08 million Btu/hour, and a maximum process rate of 4.00 pounds per hour (lbs/hr).

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (2) (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

Pursuant to 326 IAC 2-6 (Emission Reporting), the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015

Indianapolis, IN 46206-6015
and
Office of Environmental Services
Air Quality Management Section, Compliance Data Group
2700 South Belmont Avenue
Indianapolis, Indiana 46221-2097

no later than March 1 of each year, with the annual notice being submitted in the format attached.

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating), any change or modification to the facilities listed above which may increase the actual VOC emissions to greater than fifteen (15) pounds per day (lb/day) shall obtain prior approval from the Office of Environmental Services (OES) and Office of Air Quality (OAQ). Compliance with this condition shall make the Miscellaneous Metal Parts Rule 326 IAC 8-2-9 not applicable. To document compliance with this condition, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken daily and shall be complete and sufficient to establish compliance with the the VOC emission limits established in this condition.

(1) The weight of VOC containing material used, including purchase orders and invoices necessary to verify the type and amount used.

(2) The VOC content (weight percent) of each material used

The source may operate according to 326 IAC 2-5.5. An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez, Administrator

aco

cc: File, Marion County
Air Compliance, Matt Mosier
IDEM, Mindy Hahn
Permits, Angelique Oliger

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	**Industrial Anodizing Co., Inc.**
Address:	**1610 West Washington Street**
City:	**Indianapolis, Indiana 46206**
Authorized individual:	**William Wimmenauer**
Phone #:	**(317) 637-4641**
Registration #:	**097-15011-00414**

I hereby certify that Industrial Anodizing Co., Inc. is still in operation and is in compliance with the requirements of Registration 097-15011-00414.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Indianapolis Office of Environmental Services

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Industrial Anodizing Co., Inc.
Source Location:	1610 West Washington Street, Indianapolis, Indiana 46206
County:	Marion
SIC Code:	3471
Operation Permit No.:	097-15011-00414
Permit Reviewer:	Angelique Oliger

The Office of Environmental Services (OES) has reviewed an application from Industrial Anodizing Co., Inc. relating to the operation of anodizing of metals.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) acid bath containing phosphoric and nitric acids mixed with water. Acid mist is controlled with and air scrubber, identified as emission unit 5110-01, with a maximum capacity of 4.2 cubic feet per minute (acfm), and exhausting to stack 1.

(b) One (1) natural gas boiler with maximum heat input rate of 0.08 million Btu/hour, and a maximum process rate of 4.00 pounds per hour (lbs/hr).

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) OP 5110-01, issued on November 27, 1996. This operating permit was issued for one (1) acid bath containing phosphoric and nitric acids mixed with water. Acid mist was controlled by a Cyclo-Mist Arrestor model GMA-14, serial number 136, manufactured by SCH Engineering. Efficiency was rated at 98%.

All conditions from previous approvals were incorporated into this permit.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
1	air scrubber	24.5	2.5	.84-4.2	60-90

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on September 18, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	0.0048
PM-10	0.0048
SO_2	0.0002
VOC	0.0019
CO	0.0294
NO_x	17.56

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of NO_x is equal to or greater than five (5) tons per year and equal to or less than twenty-five (25) tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than twenty-five (25) tons per year. Therefore, the source is registered and subject to the provisions of 326 IAC 2-5.5.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	negligible
PM-10	negligible
SO_2	negligible
VOC	negligible
CO	negligible
NO_x	0.14
HAP (specify)	negligible

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO_2	maintenance attainment
NO_2	attainment
Ozone	maintenance attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Marion County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.0048
PM10	0.0048
SO_2	0.0002
VOC	0.0019
CO	0.0249
NO_x	17.56

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit R097-15011-00414, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OES inspector assigned to the source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. Steam generating units that have a maximum design heat input capacity of less than ten (10) million Btu per hour (10 mm Btu/hr) are not subject to 40 CFR Part 60 Subpart Dc. Therefore, this source is not subject to 40 CRF Part 60 Subpart Dc.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on September 18, 2001. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of anodizing of metals will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit

more than ten (10) tons per year of NO_x and is located in Marion County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The operation of anodizing metals will emit less than fifteen (15) tons per year of VOCs. Therefore, 326 IAC 8-2-9 (Miscellaneous Metal Coating) does not apply.

326 IAC 6-2-4 (Particulate Matter Limitations for Sources of Indirect Heating)

Boilers emission unit ID #01 is subject to the provisions of 326 IAC 6-2-1(d) because it is located in Marion County and was constructed after September 21, 1983. Particulate emissions from indirect heating facilities shall be limited by the following equation:

$Pt = 1.09/Q^{0.26} = 1.09/0.08^{0.26} = 2.10$

where Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input
Q = Total source maximum operating capacity rating in million Btu per hour mBtu/hr) heat input.

For Q less than 10 mm Btu per hour (mmBtu/hr), Pt shall not exceed 0.60. Total source maximum operating capacity is less than 10 million Btu per hour (mmBtu/hr). Therefore, particulate matter emissions from the natural gas fired boiler shall not exceed 0.6 pounds per million Btu (lbs/mm Btu).

Conclusion

The operation of anodizing of metals shall be subject to the conditions of the attached proposed Registration 097-15011-00414.

Emissions Calculation for acid bath

*The maximum rate of nitric acid used is 4.0 pounds per hour (lbs/hr).

Potential Emissions Calculations

NO_x:

4.0 lbs / 1 hr * 8,760 hr / yr * 1 ton / 2000 lbs = 17.52 tons / year of NO_x

Appendix A: Emission Calculations
Natural Gas Combustion Only
Company Name: Industrial Anodizing Co., Inc.
Address City IN Zip: 1610 West Washington Street, Indianapolis, Indiana 46206
Registration: 097-15011-00414
Reviewer: Angelique Oliger
Date: 02/04/03

	Heat Input Capacity (MMBtu/hr)	**Natural Gas Potential Throughput (MMCF/yr)**
TOTAL	0.080	0.7

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	13.7	13.7	0.6	100.0	5.3	84.0
Potential Emission in tons/yr	0.0048	0.0048	0.0002	0.0350	0.0019	0.0294

Methodology

MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36
Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton